

ABSTRACT OF THE DISCLOSURE

5 APPARATUS AND METHOD OF MAKING A REDUCED SENSITIVITY SPIN
VALVE SENSOR APPARATUS IN WHICH A FLUX CARRYING CAPACITY
IS INCREASED

Apparatus and methods for reducing the sensitivity
of spin valve sensor read heads for magnetic tape
10 applications are provided. The apparatus and methods
compromise the large output gain derived from using state
of the art spin valve sensors in order to reduce the flux
capture and thus, the signal distortion in the spin valve
sensor. In order to provide a reduced sensitivity spin
15 valve sensor, one or more of the basic sensitivity of the
spin valve, the flux carrying capability of the free
layer, and the flux injection efficiency of the spin
valve head structure are modified to reduce the flux
capture by the sensing layer.